

## Agarose gel electrophoresis

- DNA fragments obtained from PCR (colony-PCR) or restriction digest are separated by agarose gel electrophoresis
- All DNA samples are run on 1% agarose gels in 1xTAE buffer
- To visualize DNA, gels contained 0.5  $\mu$ L of ethidiumbromide (EtBr)
- DNA samples are mixed with 6 x loading buffer (0.25% bromphenol blue, 0.25% xylencyanole, 30% glycerol) and applied to the gel
- Electrophoresis is performed at 100 mV for 30 min
- GeneRuler™ GeneRuler Mix Ladder from Thermo Scientific is used as standard
- Gels were run in 1x TAE buffer working solution

Table 11: Agarose gel electrophoresis gel and buffers

Name	Components
6x loading dye	0.25% Bromphenol blue 0.25% Xylencyanole 30% Glycerol
50xTAE buffer	2 M Tris 2 M Acetic acid 10 % (v/v) 0.5 M EDTA pH 8.0
1% agarose gel	diluted to 1x TAE buffer working solution 1% Agar 0.5 $\mu$ L EtBr